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ABSTRACT

A study investigated the role of pragmatics, the factors that govern choice of language in social interaction, on interpretation of elliptical verb phrases (VPs) in spoken English by learners of English as a Second Language (ESL). Ellipsis requires the listener to recall the surface form of a presupposed element and to integrate it into the sentences containing the anaphor. Research indicates that native speakers (NSs) of English generally have poor memory for surface details, and that they try to interpret elliptical VPs initially by attempting to access structural information in short-term memory. However, when this strategy fails, pragmatic information influences the interpretation. The current study involved 141 intermediate to advanced ESL learners who listened to a series of recorded passages including elliptical VPs with either a plausible or an implausible interpretation. Distance between antecedent and anaphor varied between subjects. Each passage was followed by a question suggesting a plausible or implausible reading, to which subjects responded affirmatively or negatively. Analysis of error rates revealed that in contrast to NSs, and regardless of differing proficiency levels, these learners showed a preferred listening strategy of attention to surface form over use of pragmatic information, perhaps due to frequent testing. (Author/MSE)

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Investigating the Roles of Structure and Pragmatics: ESL Learners' Interpretation of Elliptical Verb Phrases

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Abstract

A study was conducted to investigate the influence of pragmatics on the interpretation of elliptical verb phrases (VPs) in spoken English by ESL learners.

Ellipsis requires the listener to recall the surface form of a presupposed element and to integrate it into the sentence containing the anaphor.

Studies have shown that native speakers (NS) of English generally have a poor memory for surface details. Garnham and Oakhill (1987) found that NS try to interpret elliptical VPs initially by attempting to access structural information in short-term memory, however, when this strategy fails, pragmatic information influences the interpretation.

The current study involved a total of 141 intermediate to advanced ESL learners who listened to a series of recorded passages including elliptical VPs with either a plausible or implausible interpretation. Distance between antecedent and anaphor varied between subjects. Each passage was followed by a question suggesting a plausible or implausible reading, to which subjects responded by circling 'yes' or 'no'.

Analysis of error rates revealed that in contrast to NS, L2 learners' memory for surface form is better. Regardless of their differing levels of linguistic proficiency, these learners showed a preferred listening strategy of attention to surface form over use of pragmatic information, perhaps arising as a consequence of frequent testing.

Introduction

One of the current areas of research interest in second language acquisition is the acquisition of not only linguistic competence but also pragmatic awareness by adult learners of English as a second language (ESL). Among those aspects of their development which do not lend themselves well, if at all, to classroom instruction is the interpretation of some anaphoric devices. This paper presents the findings of a study conducted to investigate the relative influences of structure and pragmatics on the interpretation of a particular type of anaphor, elliptical verb phrases (VPs), in spoken English by ESL learners at various levels of language proficiency. Findings demonstrate that while current testing measures discriminate levels of linguistic proficiency, they do not reflect any significant development in the use of pragmatic information in listening comprehension, even in an intensive language program in the host environment.

Ellipsis is one of several devices identified by Halliday and Hasan (1976) which serve to express continuity at the discourse level. It involves the omission of explicit reference to a presupposed nominal, verbal or clausal element, as in the following example of verbal ellipsis where Ø in (b) represents the underlined element in (a) which must be recovered to construct a coherent interpretation.

(1) a. The customer had <u>yelled at the slow cashier</u>.

b. The manager had Ø too.

To arrive at such an interpretation, the listener's/reader's task

initially requires recognition that an anaphor exists which, in the case of ellipsis, means the recognition that material has been deleted, and that this deletion is context-dependent. The presupposed information or antecedent must be retrieved, and the two integrated. Although the reader has the advantage of looking back in the text to recover information, the listener is dependent upon memory.

Ellipsis has also been classified as a surface versus a deep anaphor, i.e., one which refers to a linguistic or endophoric antecedent, and requires the listener to access a surface representation (e.g. an antecedent VP) in short-term memory through what may be described as a type of copying process (Hankamer & Sag, 1979). In contrast, a deep anaphor, as in the case of the substitute element <u>did it</u>, may have a linguistic (endophoric) antecedent or, as in (2), a contextual antecedent (exophoric). It has been suggested that interpretation of deep anaphors is not made with reference to syntactic or surface details, but is accomplished through reference to a mental 'discourse model' of the situation, which includes inferred information and plausible reasoning (Sag & Hankamer, 1984).

(2) Chris: "Pat <u>did it</u>." [pointing to the messy room]

The availability of a surface representation in short-term memory, then, is a factor in the interpretation of surface anaphora. Using a sentence recognition task, Sachs (1967) found that memory for surface form generally decays rapidly although the gist or general meaning is retained. Wanner (1974) also noted the

influence of task demands on memory for surface form. After giving subjects routine instructions to an experiment, they were given a surprise recognition test on the instructions themselves seconds later. Memory for meaning was excellent (100% correct), however, only chance performance was noted for surface form.

Two exceptions to this pattern have been documented. Johnson-Laird and Stevenson (1970) found that verbatim detail can be recalled if subjects are aware that they will be tested on this rather than just on meaning, suggesting that subjects are able to use a different strategy when necessary, perhaps some form of rehearsal. In addition, memory for surface form as well as meaning is excellent for utterances considered to have high interactional content, i.e. those which convey pragmatically important information such as the speaker's intentions and attitudes in addition to information, as one finds in criticisms or jokes (Keenan, MacWhinney & Mayhew, 1977). This particular study involved a surprise recognition memory test approximately 30 hours (on average) following statements made during a luncheon discussion group. Murphy (1985) investigated the effects of factors such as length of antecedent and distance between anaphor and antecedent on the availability of an appropriate structural representation in short-term memory. Subjects were asked to read brief stories, one sentence at a time, each containing one example of VP anaphora. Reading times, indicating the time involved in integrating the linguistic antecedent into the sentence containing the anaphor, were slow in the case of long antecedents and those separated from

the anaphor by a short sentence.

Garnham and Oakhill (1987) investigated the influence of both anaphor-to-antecedent distance as well as plausible reasoning on the interpretation of elliptical VPs in a self-paced reading task. In some passages, an additional short phrase was inserted between the antecedent and the sentence containing the anaphor (distance condition). Given their relatively poor memory for surface form in most situations, native speakers have pragmatic cues available to aid interpretation. In some of the passages used by Garnham and Oakhill, the correct interpretation (accurate integration of surface representation with anaphor) represented a plausible situation; in the others, the correct interpretation was less plausible according to general world knowledge. Each passage was followed by a question (plausible or implausible). To answer this yes/no question correctly, the subject had to have interpreted the elliptical phrase correctly.

Statistical analysis of error rates indicated a main effect for both plausibility and distance. Results showed that native speakers of English tended to assign plausible, although incorrect, meanings to the elliptical VPs. Pragmatic influence tended to increase with the presence of an intervening phrase. Reading times were significantly longer with distance, and in instances where the correct linguistic interpretation was actually implausible and conflicted with a plausible cue from context. Plausibility had a significantly greater influence when an intervening phrase was present. Findings suggest that native speakers try to interpret

elliptical VPs initially by attempting to access a structural representation in short-term memory, but when this strategy fails, the alternative one of using pragmatic cues can and does affect their interpretation.

Native speaker (NS) findings, however, cannot necessarily be generalized to the nonnative speaker (NNS) population. Factors such as general comprehension and relatively uniform linguistic competence, which are assumed with native speaker subject groups, are variables which have to be considered when interpreting responses from NNS subject populations.

The current study was undertaken to investigate the relative roles of surface form and pragmatics in the interpretation of elliptical VPs encountered in spoken English by adult ESL learners across levels of linguistic proficiency.

Method

Subjects

A total of 141 subjects participated, including learners from the low intermediate to advanced levels of English study at Indiana University. The majority (109) were enrolled in the Intensive English Program, and the remaining 32 were enrolled in a course (L100) which provides half-time academic study accompanied by half-time English language improvement in one or more skills. Placement criteria involve a battery of skill tests including listening comprehension. Of the total number of subjects, approximately 91% gave one of the following as their native language (in declining order of frequency): Japanese, Arabic, Chinese, Korean, and

Spanish. The L1s of the remaining 9% were varied with no more than two speakers of any one language.[1]

Materials

Materials were adapted from those used by Garnham and Oakhill. A total of 30 passages was used including fillers designed to distract subjects from the task objective.[2] Some examples are shown in Table 1. Each passage contained an initial scene-setting statement, a sentence containing the antecedent VP and a sentence containing the anaphor. Distance between anaphor and antecedent was varied between subjects (creating two groups of subjects at each level), and achieved by inserting an appropriate prepositional phrase (PP) into the antecedent sentence. Half of the passages carried a plausible reading and half a less plausible one. Vocabulary was selected on the basis of its familiarity to subjects in the lowest proficiency level involved in the study. Each passage was followed by a yes/no question (the content of which suggested a plausible or implausible situation). The correct answer to the question depended upon the learners' ability to integrate the linguistic antecedent with the sentence containing the anaphor.

Table 1

Sample Materials

Plausible Interpretation - Correct Answer 'yes'

A new restaurant was ready to open downtown.

The manager had given instructions to the waiters (before the grand opening).

The chef had too.

Question: Did the chef give instructions to the waiters?

Plausible Interpretation - Correct Answer 'no'

Many animals at the zoo were sleeping in the warm sun.

The zookeeper had fed the monkeys (delicious peanuts and bananas).

The visitors had too.

Question: Did the zookeeper feed the visitors?

Implausible Interpretation - Correct Answer 'yes'

The police came quickly to the department store in the mall.

The thief had robbed the customer (during a busy afternoon).

The sales clerk had too.

Question: Did the sales clerk rob the customer?

Implausible Interpretation - Correct Answer 'no'

It had been a busy day at the hospital.

The doctor had examined the elderly patient (during the early morning).

The child had too.

Question: Did the doctor examine the child?

Procedure

As ellipsis is more often a feature of oral versus written discourse, at least in American English (Witte & Faigley, 1981), aural presentation was used. Passages were tape-recorded at a normal speaking rate. Subjects were tested in a classroom setting. They were instructed to listen to the recorded passages and circle 'yes' or 'no' on an answer sheet in response to each question, as quickly and accurately as possible. Instructions and two practice trials were also heard on the tape to allow these subjects as NNS to become familiar with the voice.

Results

The mean error percentage for each level of proficiency is shown in Table 2, according to both the plausibility/implausibility of the situation and the distance between antecedent and anaphor, i.e. presence or absence of an intervening phrase. Several patterns appear: errors in the interpretation of the elliptical VPs generally decrease as the level of proficiency increases; error rates are lower in implausible interpretations where the antecedent and anaphor are not separated by an intervening phrase, i.e., the linguistic antecedent is more readily accessible; and, error rates are lower overall when integrating information provides a plausible reading.

Table 2

Mean Percentage Errors - By Plausibility, Distance & Level

		Plausible	Implausible
Level			
3	(No PP)	36	54
	(PP)	36	68
4	(No PP)	34	47
	(PP)	22	52
5	(No PP)	27	46
	(PP)	22	49
6	(No PP)	17	35
	(PP)	30	42
L100	(No PP)	18	39
	(PP)	23	47

Note. PP = intervening prepositional phrase

A Manova (repeated measures) was performed on error rates to investigate the potential main effects and interactions of level, plausibility and distance. Initially all levels as shown in Table 2 were included in the statistical analysis and revealed a significant main effect of proficiency level on error rates, $F(8,260)=2.89$, $p<0.1$. The two groups at Level 3, however, provided a small number of subjects (6 and 8) compared to the other groups, which can cause spurious significant findings in this type of analysis. There had also been some question as to possible comprehension difficulties with this level of proficiency, although

every effort was made to select familiar vocabulary and situations. On subsequent statistical analysis excluding Level 3, the effects of condition, plausibility and level failed to reach significance, although the overall linguistic proficiency of these learners does vary between Level 4 (intermediate) and L100 (students eligible for part-time academic study). No significant interactions were obtained.

Discussion

Although the variability inherent in a NNS subject population, despite placement testing, makes any conclusions somewhat tentative, ESL learners appear to be better than NS at retaining surface form. This may reflect a strategy similar to a type of rehearsal as suggested by Johnson-Laird and Stevenson (1970) to explain improved memory by NS for verbatim detail when they know a memory test will be given. Malt (1985) also found that native speakers interpreted VP ellipsis faster when the utterance containing the antecedent was perceived as likely to be related to subsequent material, e.g. ellipsis found in answers to questions, suggesting that people selectively keep information available if its likely to be needed later on. For the learners in this intensive language program, such a strategy may be quite routinely employed especially in listening task situations, and may well have developed as a consequence of the frequent testing they are exposed to throughout the program's 7-week sessions. It certainly is one that could develop by the time learners reach Level 4 and could easily persist into L100. Standardized tests like the TOEFL do not

permit note-taking while participants are listening to passages on which they will later be tested. Despite the use of fillers in this experiment which were designed to distract these learners from the focus of the materials, their repeated exposure to listening tests appears to have provided good 'training' for this type of task. The processing load created by a focus on form exists at a cost to other functions such as the use of pragmatic information (as suggested by these findings), and the development of some metacognitive skills in ESL learners with low reading scores as noted by Whyte (1992). It may also be that a prepositional phrase is not sufficient in length to test the limits of the accessibility of a surface representation for these subjects.

Perhaps the most interesting implication for further study is the ESL learners' focus on surface representations in listening and reading. It is not necessarily the case that pragmatic cues do not play a role for ESL learners, but as long as a strategy that is oriented to surface form is successful, it appears to be the one that dominates. Despite the fact that placement testing has indicated these learners represent different levels of linguistic proficiency, ranging from low intermediate to advanced, statistical analysis of current findings suggests that they represent a somewhat homogeneous population in terms of their reliance on surface form over use of pragmatic information. Certainly as learners progress in their acquisition of English and encounter increasing amounts of the language in natural settings, a rehearsal type of strategy would become less effective and impede the further

development of communicative proficiency. Perhaps NNS who have left intensive or semi-intensive language study, and have become involved in their regular academic programs with greater assimilation into NS environments would show results closer to those of the NS groups.

References

Garnham, A., & Oakhill, J. (1987). Interpreting elliptical verb phrases. Quarterly Journal of Experimental Psychology, 39A, 611-627.

Halliday, M.A.K., & Hasan, R. (1976). Cohesion in English. London: Longman.

Hankamer, J., & Sag, I.A. (1976). Deep and surface anaphora. Linguistic Inquiry, 7, 391-426.

Johnson-Laird, P,N., & Stevenson, R. (1970). Memory for syntax. Nature, 227, 412.

Keenan, J.M., MacWhinney, B., & Mayhew, D. (1977). Pragmatics in memory: A study of natural conversation. Journal of Verbal Learning and Verbal Behavior, 16, 549-560.

Malt, B.C. (1985). Processes of understanding anaphora. Journal of Memory and Language, 24, 290-303.

Murphy, G. L. (1985). Processes of understanding anaphora. Journal of Memory and Language, 24, 290-303.

Sachs, J.S. (1967). Recognition memory for syntactic and semantic aspects of connected discourse. Perception & Psychophysics, 2, 437-442.

Sag, I.A., & Hankamer, J. (1984). Toward a theory of anaphoric processing. Linguistics and Philosophy, 7, 325-435.

Wanner, E. (1974). On remembering, forgetting, and understanding sentences. The Hague: Mouton.

Whyte, S. (1992). Process versus product: tapping metacognition in ESL reading. Unpublished manuscript, Indiana University, Department of Linguistics, Bloomington.

Witte, S.P., & Faigley, L. (1981). Coherence, cohesion and writing quality. College Composition and Communication, 32, 189-204.

Author Notes

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Footnotes

1 Native speaker linguists of the major L1s of subjects in this study provided information on the status of VP ellipsis in these languages. As an example, let us take the following pairs of sentences. (Structures such as that shown in (1) were used in the study.)

(1) a. John had gone to the store.

b. Bill had Ø too.

(2) a. John went to the store.

b. Bill Ø too.

In Spanish, only constructions like (2) exist, and are more a feature of spoken rather than written discourse. In Arabic, constructions such as (2) are possible in speech. In Chinese, Japanese and Korean, there is no VP ellipsis. Therefore, the materials in the study represented a nonnative discourse feature for <u>all</u> L1 groups, but one to which they had been exposed in the intensive language program.

2 Time constraints on the involvement of these learners in experimental situations, and the subject fatigue that occurs frequently in an intensive language program limited the length of the task.